



Humoral biomarkers of latex allergy

Citation

Giavina-Bianchi, Pedro, Laila Sabino Garro, Marcelo Vivolo Aun, Antonio Abílio Motta, Mariana Castells, and Jorge Kalil. 2014. "Humoral biomarkers of latex allergy." *Clinical and Translational Allergy* 4 (Suppl 3): P128. doi:10.1186/2045-7022-4-S3-P128. <http://dx.doi.org/10.1186/2045-7022-4-S3-P128>.

Published Version

doi:10.1186/2045-7022-4-S3-P128

Permanent link

<http://nrs.harvard.edu/urn-3:HUL.InstRepos:12785876>

Terms of Use

This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at <http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA>

Share Your Story

The Harvard community has made this article openly available.
Please share how this access benefits you. [Submit a story](#).

[Accessibility](#)



POSTER PRESENTATION

Open Access

Humoral biomarkers of latex allergy

Pedro Giavina-Bianchi¹, Laila Sabino Garro², Marcelo Vivolo Aun², Antonio Abílio Motta², Mariana Castells^{3*}, Jorge Kalil²

From 6th Drug Hypersensitivity Meeting (DHM 6)
Bern, Switzerland. 9-12 April 2014

Background

Although latex allergy is decreasing in several countries, it is still a global health problem that is associated with life-threatening reactions. The main objective of this study is to identify clinical and laboratory factors associated with sensitization and allergy to latex, including latex-specific IgE, IgG4 and IgA.

Method

Observational study in a cohort of 400 children and adolescents with defect of neural tube closure. Patients underwent clinical interview and had their blood drawn to measure specific serum IgE, IgG4 and IgA to latex. The prevalence of sensitization and allergy to latex were calculated and possible associations with clinical and laboratory variables were analyzed.

Results

The prevalence of sensitization and allergy to latex in patients presenting defects in neural tube closure was 33.2% and 12.2%, respectively. Cutaneous manifestations of latex allergy were the most common (79.6%), but anaphylaxis was observed in 4.75% of patients. Clinical and surgical factors associated with latex allergy were identified and a symptom score to screening patients was developed. Concentration of specific IgE to latex >0.77 kUA/l presented good accuracy in differentiating asymptomatic sensitization from allergy. Measurement of specific IgE to recombinant allergens also showed good accuracy in the diagnosis of allergy. The specific serum IgG4 concentration was negatively associated with allergy to latex, but this was not observed for specific IgA.

Conclusion

Higher concentration of specific IgE to latex and Hevb5, lower concentration of specific IgG4 to latex and symptom score $\geq 40\%$ were associated with latex allergy.

Authors' details

¹University of Sao Paulo, Clinical Immunology and Allergy, USA. ²University of Sao Paulo, Clinical Immunology and Allergy, Brazil. ³Harvard Medical School, Division of Rheumatology, Allergy and Immunology, Department of Medicine, BWH, USA.

Published: 18 July 2014

doi:10.1186/2045-7022-4-S3-P128

Cite this article as: Giavina-Bianchi et al.: Humoral biomarkers of latex allergy. *Clinical and Translational Allergy* 2014 **4**(Suppl 3):P128.

**Submit your next manuscript to BioMed Central
and take full advantage of:**

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit



³Harvard Medical School, Division of Rheumatology, Allergy and Immunology, Department of Medicine, BWH, USA
Full list of author information is available at the end of the article